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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/517,952	CRITZ ET AL.	
	Examiner	Art Unit	
	Kandasamy Thangavelu	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 March 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Introduction

1. Claims 1-52 of the application have been examined.

Drawings

2. The draft person has objected to the drawings; see a copy of Form PTO-948 for an explanation.

Specification

3. The disclosure is objected to because of the following informalities:

Page 2, Line 6, "A designer, therefore, faces my tradeoffs" is incorrect.

Appropriate correction is required.

Claim Objections

4. The following is a quotation of 37 C.F.R § 1.75 (d)(1):

> The claim or claims must conform to the invention as set forth in the remainder of the specification and terms and phrases in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

5. Claims 33 and 52 are objected to because of the following informalities:

Claim 33, "the report generation computer program defines the reporting components are defined according to ..." is grammatically incorrect.

Claim 52, "the report generator defines according to an object oriented report programming language" is not understood.

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 5, 32 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 5 refer to "the model". It is not understood if the applicants refer to the mathematical or simulation model.

Claim 32 states, "the report generation computer program can be hierarchically assembled to form the report". It is not understood, as to how assembling the computer program hierarchically will form the report.

Claim 52 states, "the report generator defines according to an object oriented programming language". It is not understood, as to what the report generator defines according to object oriented programming language.

Claim Interpretations

7. In Claims 4 and 5, the examiner has assumed the "the model" to mean the simulation model.

In Claim 32 the examiner has assumed "the reporting components can be hierarchically assembled to form the report".

In Claim 52 the examiner has assumed "the reporting components are defined according to an object oriented programming language".

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

9. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1, 2, 3, 8, 12, 13, 15, 16, 18- 21, 26, 30, 32, 34-36, 37, 42, 46, 47, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Young et al.** (YO) (ACM, 2000) in view of **Weitz** (WE) (IEEE, 1998).

10.1 YO teaches a knowledge based electronic information and documentation system. Specifically, as per Claim 1, YO teaches a method for generating a report (Page 280, Col 1, Para 1); comprising:

generating a report as a function of the processed reporting components (Page 280, Col 1, Para 1; Page 281, Col 1, Para 4).

YO teaches defining a set of reporting components that can be assembled to form a report (Page 280, Col 1, Para 1). YO does not expressly teach defining a set of reporting components that can be assembled to form a report template. WE teaches defining a set of reporting components that can be assembled to form a report template (Page 3, Col 2, Para 4; Page 4, Col 1, Section 4.2.1), as that facilitates selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document (Page 3, Col 2, Para 4). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO with the method of WE that included defining a set of reporting components that can be assembled to form a report template, as that would facilitate selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document.

YO teaches processing the reporting components to perform one or more operations within a computing environment provided by a mathematical tool (Page 280, Col 2, Para 1 and Para 2). YO does not expressly teach processing the reporting components of the report template to perform one or more operations within a computing environment provided by a mathematical tool. WE teaches processing the reporting components of the report template to perform one or more operations (Page 3, Col 2, Para 4; Page 4, Col 1, Section 4.2.1), as that facilitates selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document (Page 3, Col 2, Para 4) and processing them using the selected mathematical tool. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to combine the method of YO that included processing the reporting components to perform one or more operations within a computing environment provided by a mathematical tool with the method of WE that included processing the reporting components of the report template to perform one or more operations, as that would facilitate selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document and processing them using the selected mathematical tool.

10.2 As per Claim 2, YO and WE teach the method of Claim 1. YO also teaches that defining the set of reporting components includes defining flow control components that control an order for processing the reporting component (Page 282, Col 1, Para 7 to Page 282, Col 2, Para 2; Page 284, C1, Para 6 to Col 2, Para 2).

10.3 As per Claim 3, YO and WE teach the method of Claim 1. YO also teaches that processing the reporting components includes bi-directionally communicating with the computing environment (Page 281, Col 1, Para 3).

10.4 As per Claim 8, YO and WE teach the method of Claim 1. YO also teaches that processing the reporting components includes requesting data from a simulator (Page 280, Col 1, Para 2).

10.5 As per Claim 12, YO and WE teach the method of Claim 1. YO also teaches that generating the report includes generating an intermediate representation of the report and transforming the intermediate representation into an electronic document according to a user-selected format (Page 280, Col 1, Para 1; Page 281, Col 1, Para 4).

10.6 As per Claim 13, YO and WE teach the method of Claim 12. YO does not expressly teach that generating an intermediate representation of the report includes generating a report in one of the following formats: Extensible Markup Language or Standard Generalized Markup Language. WE teaches that generating an intermediate representation of the report includes generating a report in one of the following formats: Extensible Markup Language or Standard Generalized Markup Language (Page 2, Col 1, Para 2; Page 2, Col 2, Para 4), as that facilitates defining the logical structure of the document using a tree structure thus facilitating efficient automated document retrieval and processing (Page 2, Col 1, Para 2; Page 2, Col 2, Para 4). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to

modify the method of YO with the method of WE that included generating an intermediate representation of the report including generating a report in one of the following formats: Extensible Markup Language or Standard Generalized Markup Language, as that would facilitate defining the logical structure of the document using a tree structure thus facilitating efficient automated document retrieval and processing.

10.7 As per Claim 15, YO and WE teach the method of Claim 1. YO does not expressly teach that the reporting components can be hierarchically assembled to form the report. WE teaches that the reporting components can be hierarchically assembled to form the report (Page 2, Col 2, Para 4), as that facilitates efficient automated document retrieval and processing (Page 2, Col 2, Para 4). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO with the method of WE that included the reporting components hierarchically assembled to form the report, as that would facilitate efficient automated document retrieval and processing.

10.8 As per Claim 16, YO and WE teach the method of Claim 1. YO also teaches that processing the reporting components includes processing each component according to behavior defined by ancestor component within the hierarchy (Page 280, Col 2, Para 2).

10.9 As per Claim 18, YO and WE teach the method of Claim 1. YO does not expressly teach that the report template refers to a second report template, and further wherein the reporting components are processed as a function of results from processing the second report

template. WE teaches that the report template refers to a second report template, and further wherein the reporting components are processed as a function of results from processing the second report template (Page 2, Col 2, Para 4; Page 3, Col 2, Para 4), as that facilitates utilization of the logical organization of the documents as tree structure for efficient automated document retrieval and processing (Page 2, Col 1, Para 2 and Page 2, Col 2, Para 4). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO with the method of WE that included the report template referring to a second report template, and the reporting components being processed as a function of results from processing the second report template, as that would facilitate utilization of the logical organization of the documents as tree structure for efficient automated document retrieval and processing.

10.10 As per Claim 19, YO teaches a report generation computer program, tangibly stored on a computer-readable medium, for generating a report from a model simulation (Page 280, Col 1, Para 1); the computer program comprising instructions operable to cause a programmable processor to:

generate a report as a function of the processed reporting components (Page 280, Col 1, Para 1; Page 281, Col 1, Para 4).

YO teaches defining a set of reporting components that can be assembled to form a report (Page 280, Col 1, Para 1). YO does not expressly teach defining a set of reporting components that can be assembled to form a report template. WE teaches defining a set of reporting components that can be assembled to form a report template (Page 3, Col 2, Para 4; Page 4, Col

1, Section 4.2.1), as that facilitates selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document (Page 3, Col 2, Para 4). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the report generation computer program of YO with the report generation computer program of WE that included defining a set of reporting components that can be assembled to form a report template, as that would facilitate selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document.

YO teaches processing the reporting components to perform one or more operations within a computing environment provided by a mathematical tool (Page 280, Col 2, Para 1 and Para 2). YO does not expressly teach processing the reporting components of the report template to perform one or more operations within a computing environment provided by a mathematical tool. WE teaches processing the reporting components of the report template to perform one or more operations (Page 3, Col 2, Para 4; Page 4, Col 1, Section 4.2.1), as that facilitates selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document (Page 3, Col 2, Para 4) and processing them using the selected mathematical tool. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to combine the report generation computer program of YO that included processing the reporting components to perform one or more operations within a computing environment provided by a mathematical tool with the report generation computer program of WE that included processing the reporting components of the report template to perform one or more operations, as that would facilitate selecting document instances or parts of

them and defining document processing operations using the logical tree structure of the document and processing them using the selected mathematical tool.

10.11 As per Claim 34, YO and WE teach the computer program product of Claim 19. YO does not expressly teach that the report generation computer program provides that the report template can reference one or more other report templates in sequence, and further wherein the results of processing one of the report templates is a function of the simulation results from processing report templates earlier in the sequence. WE teaches that the report generation computer program provides that the report template can reference one or more other report templates in sequence, and further wherein the results of processing one of the report templates is a function of the simulation results from processing report templates earlier in the sequence (Page 2, Col 2, Para 4; Page 3, Col 2, Para 4), as that facilitates utilization of the logical organization of the documents as tree structure for efficient automated document retrieval and processing (Page 2, Col 1, Para 2 and Page 2, Col 2, Para 4). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the computer program product of YO with the computer program product of WE that included the report generation computer program providing that the report template could reference one or more other report templates in sequence, and further wherein the results of processing one of the report templates was a function of the simulation results from processing report templates earlier in the sequence, as that would facilitate utilization of the logical organization of the documents as tree structure for efficient automated document retrieval and processing.

10.12 As per Claim 35, YO teaches a system comprising a technical computing environment, a model simulator and a report generator executing within an operating environment provided by a computer (Page 280, Col 1, Para 1);

YO teaches the report generator that defines a set of reporting components that can be assembled to form a report (Page 280, Col 1, Para 1). YO does not expressly teach the report generator that defines a set of reporting components that can be assembled to form a report template. WE teaches the report generator that defines a set of reporting components that can be assembled to form a report template (Page 3, Col 2, Para 4; Page 4, Col 1, Section 4.2.1), as that facilitates selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document (Page 3, Col 2, Para 4). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the system of YO with the system of WE that included the report generator that defines a set of reporting components that can be assembled to form a report template, as that would facilitate selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document.

YO teaches processing the reporting components to perform one or more operations within a computing environment provided by a mathematical tool and the simulation tool (Page 280, Col 2, Para 1 and Para 2). YO does not expressly teach the report generator includes a generation engine to processes the reporting components of the report template to extract data from the computing environment and the model simulator in order to generate a report. WE teaches the report generator includes a generation engine to processes the reporting components of the report template to extract data from the computing environment and the model simulator

in order to generate a report (Page 3, Col 2, Para 4; Page 4, Col 1, Section 4.2.1), as that facilitates selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document (Page 3, Col 2, Para 4) and processing them using the selected mathematical tool and simulation tool. It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to combine the system of YO with the system of WE that included the report generator including a generation engine to processes the reporting components of the report template to extract data from the computing environment and the model simulator in order to generate a report, as that would facilitate selecting document instances or parts of them and defining document processing operations using the logical tree structure of the document and processing them using the selected mathematical tool.

10.13 As per Claims 20, 21, 26, 30 and 32 and Claims 36, 37, 42, 46 and 50, these are rejected based on the same reasoning as Claims 2, 3, 8, 12 and 15, supra. Claims 20, 21, 26, 30 and 32 are computer program implementing the methods and Claims 36, 37, 42, 46 and 50 are computer system claims reciting the same limitations as Claims 2, 3, 8, 12 and 15, as taught throughout by YO and WE.

10.14 As per Claims 47 and 51, these are rejected based on the same reasoning as Claims 13 and 16, supra. Claims 47 and 51 are computer system claims reciting the same limitations as Claims 13 and 16, as taught throughout by YO and WE.

11. Claims 4-7, 9, 11, 14, 17, 22-25, 27, 29, 31, 33, 38-41, 43, 45, 48 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al. (YO) (ACM, 2000) in view of Weitz (WE) (IEEE, 1998), and further in view of Lannert et al. (LA) (U.S. Patent 6,101,489).

11.1 As per Claim 4, YO and WE teach the method of Claim 1. YO and WE do not expressly teach that processing the reporting components includes issuing instructions to the computing environment to modify operational parameters or initial conditions of the model. LA teaches that processing the reporting components includes issuing instructions to the computing environment to modify operational parameters or initial conditions of the model (Col 11, Lines 25-27; Col 89, Lines 54-57), as that allows the user to control the simulation by passing inputs into the simulation and receiving outputs from the simulation (Col 11, Lines 25-27) and as per YO, generating reports from the instances created by a run of the simulation system (Page 281, Col 1, Para 3). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of LA that included processing the reporting components including issuing instructions to the computing environment to modify operational parameters or initial conditions of the model, as that would allow the user to control the simulation by passing inputs into the simulation and receiving outputs from the simulation and as per YO, generating reports from the instances created by a run of the simulation system.

11.2 As per Claim 5, YO and WE teach the method of Claim 1. YO and WE do not expressly teach that processing the reporting components includes reconfiguring the model by adding or

removing a functional block from the model. LA teaches that processing the reporting components includes reconfiguring the model by adding or removing a functional block from the model (Col 11, Lines 25-27; Col 89, Lines 54-57), as that allows the user to modify the designs and interact with the simulation thus enabling rigorous testing prior to application construction (Col 26, Lines 11-23) and as per YO, generating reports from the instances created by a run of the simulation system (Page 281, Col 1, Para 3). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of LA that included processing the reporting components including reconfiguring the model by adding or removing a functional block from the model, as that would allow the user to modify the designs and interact with the simulation thus enabling rigorous testing prior to application construction and as per YO, generating reports from the instances created by a run of the simulation system.

11.3 As per Claim 6, YO and WE teach the method of Claim 1. YO and WE do not expressly teach that processing the reporting components includes requesting data from a calculation workspace of the computing environment. LA teaches that processing the reporting components includes requesting data from a calculation workspace of the computing environment (Col 11, Lines 29-33; Col 11, Lines 56-58), as that allows the user to control the simulation by passing inputs into the simulation and receiving outputs from the simulation (Col 11, Lines 25-27) and as per YO, generating reports from the instances created by a run of the simulation system (Page 281, Col 1, Para 3). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of LA that included

processing the reporting components including requesting data from a calculation workspace of the computing environment, as that would allow the user to control the simulation by passing inputs into the simulation and receiving outputs from the simulation and as per YO, generating reports from the instances created by a run of the simulation system.

11.4 As per Claim 7, YO and WE teach the method of Claim 1. YO and WE do not expressly teach that processing the reporting components includes evaluating expressions defined within the computing environment. LA teaches that processing the reporting components includes evaluating expressions defined within the computing environment (Col 11, Lines 56-58; Col 94, Lines 23-25), as that allows the user to control the simulation by passing inputs into the simulation and receiving outputs from the simulation (Col 11, Lines 25-27) and as per YO, generating reports from the instances created by a run of the simulation system (Page 281, Col 1, Para 3). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of LA that included processing the reporting components including evaluating expressions defined within the computing environment, as that would allow the user to control the simulation by passing inputs into the simulation and receiving outputs from the simulation and as per YO, generating reports from the instances created by a run of the simulation system.

11.5 As per Claim 9, YO and WE teach the method of Claim 1. YO and WE do not expressly teach that processing the reporting components includes requesting data from a graphics package. LA teaches that processing the reporting components includes requesting data from a

graphics package (Col 94, Lines 12-23), as that allows the range of input data received over time to be used to create trend graphs (Col 11, Lines 25-27) and as per YO, generating reports from the instances created by a run of the simulation system (Page 281, Col 1, Para 3). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of LA that included processing the reporting components including requesting data from a graphics package, as that would allow the range of input data received over time to be used to create trend graphs and as per YO, generating reports from the instances created by a run of the simulation system.

11.6 As per Claim 11, YO and WE teach the method of Claim 1. YO and WE do not expressly teach that processing the reporting components includes issuing commands to the simulator to advance a current state of the model simulator by one or more time steps. LA teaches that processing the reporting components includes issuing commands to the simulator to advance a current state of the model simulator by one or more time steps (Fig. 50; Col 94, Lines 23-25; Col 94, Lines 38-44; Col 94-Lines 55-60), as that allows the range of input data received over time to be used to create trend graphs (Col 11, Lines 25-27) and as per YO, generating reports from the instances created by a run of the simulation system (Page 281, Col 1, Para 3). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of LA that included processing the reporting components including issuing commands to the simulator to advance a current state of the model simulator by one or more time steps, as that would allow the range of input data received over

time to be used to create trend graphs and as per YO, generating reports from the instances created by a run of the simulation system.

11.7 As per Claim 14, YO and WE teach the method of Claim 1. YO and WE do not expressly teach that generating the report includes formatting the report as a function of a state of the simulation. LA teaches that generating the report includes formatting the report as a function of a state of the simulation (Col 93, Lines 53-64; Col 94, Lines 38-39), as that allows updating the reports as the simulation is executed (Col 93, Lines 53-64) and facilitates restarting the simulation playing back in time (Col 94, Lines 53-64). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of LA that included generating the report including formatting the report as a function of a state of the simulation, as that would allow updating the reports as the simulation was executed and facilitate restarting the simulation playing back in time.

11.8 As per Claim 17, YO and WE teach the method of Claim 1. YO also teaches that the reporting components are defined using classes, attributes, rules of inheritance and instantiation (Page 280, Col 2, Para 2). YO and WE do not expressly teach that the reporting components are defined according to an object-oriented report programming language. LA teaches that the reporting components are defined according to an object-oriented report programming language (Col 5, Lines 24-27; Col 5, Lines 45-46; Col 9, Line 58 to Col 10, Line 11), as that allows significant reductions in the design and development effort of the software involved in automatic generation of the documents (Col 9, Lines 56-58). It would have been obvious to one of

ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of LA that included the reporting components defined according to an object-oriented report programming language, as that would allow significant reductions in the design and development effort of the software involved in automatic generation of the documents.

11.9 As per Claims 22-25, 27, 29, 31 and 33 and Claims 38-41, 43, 45, 48 and 52, these are rejected based on the same reasoning as Claim 4-7, 9, 11, 14 and 17, supra. Claims 22-25, 27, 29, 31 and 33 are computer program implementing the methods and Claims 38-41, 43, 45, 48 and 52 are computer system claims reciting the same limitations as Claims 4-7, 9, 11, 14 and 17, as taught throughout by YO, WE and AL.

11.9 As per Claim 49, YO and WE teach the system of Claim 35. YO and WE do not expressly teach the generation engine issuing instructions to the simulator to modify operational parameters or initial conditions of the model. LA teaches the generation engine issuing instructions to the simulator to modify operational parameters or initial conditions of the model (Col 11, Lines 25-27; Col 89, Lines 54-57), as that allows the user to control the simulation by passing inputs into the simulation and receiving outputs from the simulation (Col 11, Lines 25-27) and as per YO, generating reports from the instances created by a run of the simulation system (Page 281, Col 1, Para 3). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the system of YO and WE with the system of LA that included the generation engine issuing instructions to the simulator to modify operational

parameters or initial conditions of the model, as that would allow the user to control the simulation by passing inputs into the simulation and receiving outputs from the simulation and as per YO, generating reports from the instances created by a run of the simulation system.

12. Claims 10, 28 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al. (YO) (ACM, 2000) in view of **Weitz** (WE) (IEEE, 1998), and further in view of **Skidmore et al.** (SK) (IEEE 1998).

12.1 As per Claim 10, YO and WE teach the method of Claim 1. YO and WE do not expressly teach that processing the reporting components includes issuing commands to the computing environment to simulate the model. SK teaches that processing the reporting components includes issuing commands to the computing environment to simulate the model (Page 6, Para 3), as that allows the user to control execution and recording of the computations in the simulation model (Page 5, Para 5) and as per YO, generating reports from the instances created by a run of the simulation system (Page 281, Col 1, Para 3). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of YO and WE with the method of SK that included processing the reporting components including issuing commands to the computing environment to simulate the model, as that would allow the user to control execution and recording of the computations in the simulation model and as per YO, generating reports from the instances created by a run of the simulation system.

12.2 As per Claims 28 and 44, these are rejected based on the same reasoning as Claim 10, supra. Claims 28 and 44 are computer program and computer system claims reciting the same limitations as Claim 10, as taught throughout by YO, WE and SK.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

The following patents are cited to further show the state of the art with respect to automated document generation systems for simulation models using various mathematical tools.

1. Young et al., "A knowledge based electronic information and documentation system", ACM, January 2000.
2. Weitz, "SGML nets: Integrating document and workflow modeling", IEEE, 1998.
3. Lannert et al., "System, method and article of manufacture for a goal based system utilizing a time based model", U.S. Patent 6,101,489, August 2000.
4. Skidmore et al., "A prototype notebook based environment for computational tools", IEEE, 1998.
5. Frank, "Enhancing object oriented modeling with concepts to integrate electronic documents", IEEE, 1997.

6. Shima et al., "Document processing apparatus and method ... for processing documents according to the requirements", U.S. Patent 5,835,922, November 1998.

7. Brandt et al., "Integrated proxy interface for web based data management reports", U.S. Patent 6,377,993, April 2002.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 703-305-0043. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska, can be reached on (703) 305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-746-73210.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

K. Thangavelu
Art Unit 2123
April 17, 2003

SAMUEL BRODA, ESQ.
PRIMARY EXAMINER